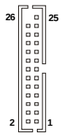
Parallel Port Header: JLPT1

JLPT1



PIN	SIGNAL	PIN	SIGNAL	PIN	SIGNAL	PIN	SIGNAL
1	RSTB#	2	AFD#	15	PRND6	16	GND
3	PRND0	4	ERR#	17	PRND7	18	GND
5	PRND1	6	PINIT#	19	ACK#	20	GND
7	PRND2	8	LPT_SLIN#	21	BUSY	22	GND
9	PRND3	10	GND	23	PE	24	GND
11	PRND4	12	GND	25	SLCT	26	KEY
13	PRND5	14	GND				

Front Panel Audio Connector: JAUD1

JAUD1

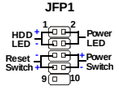
HD Audio Pin Definition

PIN	SIGNAL	DESCRIPTION
1	MIC_L	Microphone - Left channel
2	GND	Ground
3	MIC_R	Microphone - Right channel
4	PRESENCE#	Active low signal-signals BIOS that a High Definition Audio dongle is connected to the analog header. PRESENCE# = 0 when a High Definition Audio dongle is connected
5	LINEout_R	Analog Port - Right channel
6	MIC_JD	Jack detection return from front panel microphone JACK1
7	Front_JD	Jack detection sense line from the High Definition Audio CODEC jack detection resistor network
8	NC	No control
9	LINEout_L	Analog Port - Left channel
10	LINEout_JD	Jack detection return from front panel JACK2

Front Panel Connector: JFP1

Pin Definition

JFP1

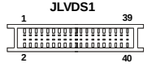


PIN	SIGNAL	DESCRIPTION
1	HD_LED +	Hard disk LED pull-up
2	FPPWR/SLP	MSG LED pull-up
3	HD_LED -	Hard disk active LED
4	FPPWR/SLP	MSG LED pull-up
5	RST_SW-	Reset Switch low reference pull-down to GND
6	PWR_SW+	Power Switch high reference pull-up
7	RST_SW+	Reset Switch high reference pull-up
8	PWR_SW-	Power Switch low reference pull-down to GND
9	RSVD_DNU	Reserved. Do not use.

***NOTE**: Incorrect setting of jumpers and connectors may damage your mainboard. Please pay special attention not to connect these headers in wrong direction. DO NOT adjust any jumper while the mainboard is powered on.*

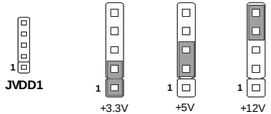
LVDS Flat Panel Connector: JLVDS1 *(for 03S)*

JLVDS1

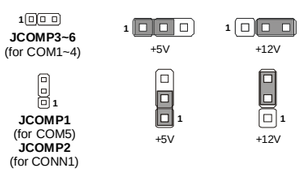


SIGNAL	PIN		SIGNAL
+12V	2	1	+12V
+12V	4	3	+12V
GND	6	5	+12V
GND	8	7	VCC3/VCC5
LCD_VDD	10	9	LCD_VDD
LDDC_DATA	12	11	LDDC_CLK
LVDS_VDDEN	14	13	L_BKLTCTL
GND	16	15	L_BKLTEN
LA_DATA0	18	17	LA_DATA0#
LA_DATA1	20	19	LA_DATA1#
LA_DATA2	22	21	LA_DATA2#
LA_CLK	24	23	LA_CLK#
LA_DATA3	26	25	LA_DATA3#
GND	28	27	GND
LB_DATA0	30	29	LB_DATA0#
LB_DATA1	32	31	LB_DATA1#
LB_DATA2	34	33	LB_DATA2#
LB_CLK	36	35	LB_CLK#
LB_DATA3	38	37	LB_DATA3#
GND	40	39	GND

LVDS Power Selection Jumper: JVDD1 *(for 03S)*



COM Port Power Jumper: JCOMP2 *(for 01S)*, JCOMP1, JCOMP3~6



Technical Support

If a problem arises with your system and no solution can be obtained from the user's manual, please contact your place of purchase or local distributor. Alternatively, please try the following help resources for further guidance.

- Visit the MSI website at ***http://global.msi.com.tw/index.php?func=service*** for FAQ, technical guide, BIOS updates, driver updates, and other information.
- Contact our technical staff at ***http://ocss.msi.com.tw***.

Important

1. *For detailed hardware and BIOS settings, please refer to the user's manual in the provided CD or download it from the MSI website.*
2. *Please visit the MSI website to get the latest drivers and BIOS for better system performance.*

NOTE: Use a grounded wrist strap before handling computer components. Static electricity may damage the components.

CAUTION: Danger of explosion if battery is incorrectly replaced. Replace only with the same or equivalent type recommended by the manufacturer.

警告使用者：
此為甲類資訊技術設備，於居住環境中使用時，可能會造成射頻擾動，在此情況下，使用者會被要求採取某些適當的對策

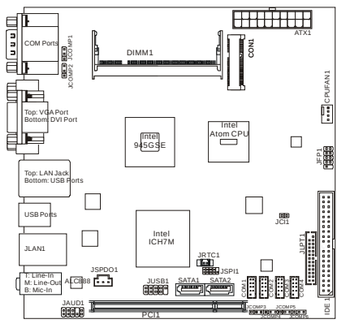
廢電池請回收

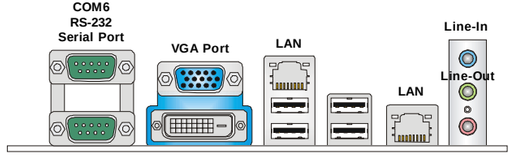
For better environmental protection, waste batteries should be collected separately for recycling or special disposal.

IM-945GSE Series

Mainboard Layout

IM-945GSE Series Mini ITX Mainboard - Option 01S

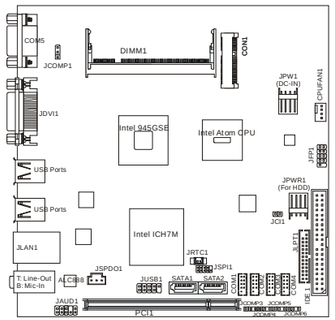




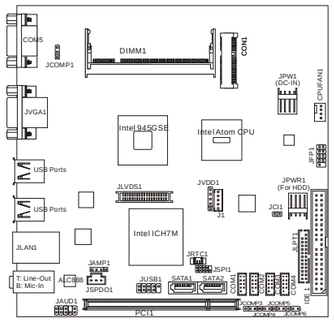
G52-98302X1

Mainboard Layout

IM-945GSE Series Mini ITX Mainboard - Option 02S

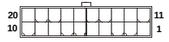


IM-945GSE Series Mini ITX Mainboard - Option 03S



Connectors & Jumpers

System Power Connector: ATX1 *(for 01S)*



Pin Definition

PIN	SIGNAL	PIN	SIGNAL
1	+3.3V	11	+3.3V
2	+3.3V	12	-12V
3	GND	13	GND
4	+5V	14	PS-ON#
5	GND	15	GND
6	+5V	16	GND
7	GND	17	GND
8	PWR OK	18	Res
9	5VSB	19	+5V
10	+12V	20	+5V

12V System Power Connector: JPW1 *(for 02S, 03S)*

Pin Definition

PIN	SIGNAL
1	12V
2	12V
3	GND
4	GND

5V/12V HDD Power Connector: JPWR1 *(for 02S, 03S)*

Pin Definition

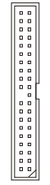
PIN	SIGNAL
1	5V
2	GND
3	GND
4	12V

Serial Port Connector: COM1, COM2, COM3, COM4

Pin Definition

PIN	SIGNAL	DESCRIPTION
1	DCD	Data Carry Detect
2	SIN	Serial In or Receive Data
3	SOUT	Serial Out or Transmit Data
4	DTR	Data Terminal Ready
5	GND	Ground
6	DSR	Data Set Ready
7	RTS	Request To Send
8	CTS	Clear To Send
9	VCC_COM	Power Source

IDE Connector: IDE1



SPI Flash ROM Pinheader: JSPI1

Pin Definition

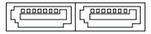
Pin	Description	Pin	Description
1	VCC3_SB	2	VCC3_SB
3	SPI_MISO_F	4	SPI_MOSI_F
5	SPI_CS0_F#	6	SPI_CLK_F
7	GND	8	GND
9	SPI_HOLD#	10	NC

Front USB Pinheader: JUSB1

Pin Definition

PIN	SIGNAL	PIN	SIGNAL
1	VCC	2	VCC
3	USB0-	4	USB1-
5	USB0+	6	USB1+
7	GND	8	GND
9	Key (no pin)	10	USBOC

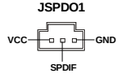
Serial ATA Connector: SATA1, SATA2



Chassis Intrusion Connector: JCI1

Fan Power Connector: CPUFAN1

S/PDIF-Out Connector: JSPDO1



Backlight Connector: J1 *(for 03S)*

Pin Definition

PIN	SIGNAL
1	12V
2	GND
3	Inverter On
4	Backlight Control
5	5V

Audio Amplifier Connector: JAMP1 *(for 03S)*

Pin Definition

PIN	SIGNAL
1	AMP_L-
2	AMP_L+
3	AMP_R-
4	AMP_R+